1905

IMPERIAL MYCOLOGICAL INSTITUTE
29 MAY 1933

Reprinted from the „ANNALES MYCOLOGICI"
(vol. III, No. 1, 1905)

Baeodromus Holwayi Arth., a New Uredineous Fungus from Mexico.

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An interesting rust on the leaves of a *Senecio* was found by Mr. Holway on his last collecting trip into central Mexico. It grew only at high altitudes, occuring from 3000 to 3400 meters and upward, but not lower. At first sight it could easily be mistaken for a Leptopuccinia, like *Puccinia Asteris*, as the sori are grouped in the same manner, and the spores germinate freely immediately upon maturity. The promycelium and large sporidia, however, have bright orange contents, and are not colorless, as in the *Pucciniaceae*. I take pleasure in dedicating the type species under this new genus to the indefatigable collector, who has done so much to make known the rich rust-flora of Mexico.

Baeodromus gen. nov. (Etym.: βαιός, *short* and δρόμος, *course*).

Spermogonia globose, subepidermal. Teleutospores catenulate, united laterally into compact definite sori; promycelium single from near apex of cell, external, recurved, bearing four globose sporidia.

Baeodromus Holwayi sp. nov.

Spermogonia epiphyllous, in small groups opposite the teleutosori, punctiform, golden yellow, becoming brown, immersed, subepidermal, globose, 100—140 μ in diameter; ostiolar filaments 30 μ long, becoming agglutinate; spermatia oblong, about 4 by 5 μ.

Teleutosori hypophyllous, densely crowded in circular groups, 3—5 mm across, golden brown, becoming chestnut-brown, centrifugal in development; teleutospores united into a solid mass, catenulate, 5—8 in a series, smooth, short cylindrical or oblong, 16—20 by 30—42 μ; wall golden brown, 1·5—2·5 μ thick.

Hab. On leaves of *Senecio cinerarioides* H. B. K.; Nevada de Toluca, Mexico, 3200 m alt. Oct. 15, 1903. E. W. D. Holway, no. 5160.

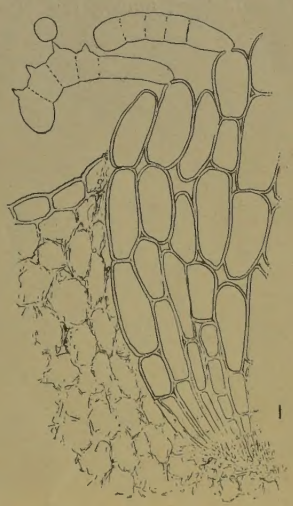

Fig. 1. Portion of a sorus of *B. Holwayi*, showing two stages in the germination, and a single sporidium.

Undried material of the above species was sent to me from Mexico, thus enabling

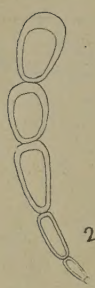

Fig. 2. A series of teleutospores from a sorus of *B. Californicus.*

me to make a study of it while fresh. Publication of the results has been delayed, and now, after a year, a second species has been detected in the herbarium. It was distributed under the name *Coleosporium Senecionis*, which it somewhat resembles in general appearance. It may be described as follows:

Baeodromus Californicus sp. nov.

Spermogonia unknown.

Teleutosori amphigenous and caulicolous, densely crowded in more or less circular groups, 2—7 mm across, golden-brown becoming cinnamon-brown, centrifugal in development; teleutospores united into a solid mass, catenulate, 4—6 spores in a series, smooth, ellipsoid or obovate, 16—20 by 28—37 μ; wall pale cinnamon-brown, 2—3 μ, thicker above, 5—8 μ.

Hab. On *Senecio Douglasii* DC.; Lytle Creek, San Bernardino mountains, Calif., April 25, 1885. S. B. Parish, no. 2562.

The relationship of these fungi is not clear. The gross appearance is that of the *Pucciniaceae*, and one might at first think that they belonged near the genus *Kuehneola*, yet the germination closely resembles that of the *Coleosporiaceae*. But from the compact structure of the sorus and the external promycelium, I am at present inclined to place the genus near *Pucciniastrum*, among the *Melampsoraceae*.